Patent claims

1. A method for identifying an agent that has an influence on the amount of an analyte expressed by a cell, said method comprising the following steps
   (a) providing a medium comprising a cell with the ability to express at least 2 analytes upon stimulation,
   (b) providing means for stimulation of said cell to express such analytes,
   (c) providing a candidate compound,
   (d) contacting the medium of (a) with the means for stimulation of (b) for a sufficient period of time to obtain a medium comprising a stimulated cell, and adding a candidate compound before, simultaneously or shortly after contacting; or adding no candidate compound,
   (e) optionally disrupting cells,
   (f) providing a matrix comprising pins which pins are coated with a coating mixture comprising at least 2 different recognition molecules, from each of which it is known that it will bind at a specific binding site to one of the analytes,
   (g) contacting the pins of the matrix of (f) with the medium obtained in (d) for a sufficient period of time to allow the formation of recognition complexes on the pins of said matrix, each recognition complex being a complex formed by binding of one single analyte to its specific recognition molecule,
   (h) providing at least 2 different detection molecules, from which detection molecules it is known that each will bind to a specific binding site of one of the recognition complexes formed in (g) without interfering with the binding of said analyte to its recognition molecule,
   (i) contacting the detection molecules of (h) with the pins of the matrix obtained in (g) for a sufficient period of time to allow the formation of detection complexes on the pins of said matrix, each detection complex being a complex formed by binding of one single recognition complex to its specific detection molecule,
   (j) determining each amount of each detection complex formed on the pins in (i),
   (k) comparing each amount of detection complex formed in the absence and in the presence of a candidate compound, and
   (l) choosing an agent which has an influence on the amount of at least one of the detection complexes formed as determined in (j) and (k).

2. The method of claim 1 wherein said analyte is selected from the group consisting of human IL-4, IL-10 and IFN-γ.

3. The method of any one of claims 1 or 2 , wherein said recognition molecule is selected from the group consisting of antibodies to human IL-4, IL-10 and IFN-γ.

4. The method of any one of claims 1 to 3 wherein the said detection molecule is selected from the group consisting of labeled antibodies to human IL-4, IL-10 and IFN-γ, said detection molecule recognizing an epitope of said analyte which is different to that recognized by the recognition molecule.

5. A kit for identifying an agent that has an influence on the amount of an analyte expressed by a cell, which kit comprises
   (a) a medium comprising a cell with the ability to express at least 2 analytes upon stimulation,
   (b) means for stimulating said cell to express such analytes,
   (c) optionally means for cell disruption,
   (d) a matrix comprising pins which are coated with a coating mixture comprising at least 2 different recognition molecules, from each of which it is known that it will bind at a specific binding site to one of the analytes, thus forming a recognition complex upon contact with one of the analytes of (a) on the pins,
   (e) at least 2 detection molecules, from which detection molecules it is known that each will bind to a specific binding site of one of the recognition complexes formed according to (d) without interfering with the binding of said analyte to its recognition molecule, thus forming a detection complex upon contact with a recognition complex formed according to (d) on the pins,
   (f) means for determining the amount of a detection complex formed on said pins.
   (g) well system(s) wherein the number and form correspond to the pins comprised in the matrix of (d),
   (h) optionally calibration standards for analytes expressed by cells of (a),
   (i) optionally control sample(s) containing known amounts/concentrations of analytes expressed by cells of (a), and
   (j) optionally instructions for using the components of said kit to quantify or to detect analytes expressed by cells of (a) in a sample.

6. An agent identified by a method according to any one of claims 1 to 4.

7. An agent of claim 6 for use as a pharmaceutical.

8. An agent identified by a method according to any one of claims 2 to 4 for the manufacture of a medicament for the treatment of autoimmune related diseases or allergic diseases.

9. A pharmaceutical composition comprising an agent identified by a method according to any one of claims 1 to 4 in association with at least one pharmaceutical excipient.

10. A method of treatment of autoimmune related diseases or allergic diseases, which treatment comprises administering to a subject in need of such treatment an effective amount of an agent identified according to any one of claims 2 to 4.